## PATENT ABSTRACTS OF JAPAN

(11) Publication number:

02-262274

(43) Date of publication of application: 25.10.1990

(51) Int. CI.

H01M 10/40

(21) Application number : **01-083479** 

(71) Applicant: MATSUSHITA ELECTRIC IND CO

(22) Date of filing:

31. 03. 1989

(72) Inventor: NISHIKAWA YUKIO

FUJII TAKAFUMI MORITA TERUYOSHI

## (54) NONAQUEOUS ELECTROLYTE SECONDARY BATTERY

## (57) Abstract:

PURPOSE: To eliminate bubbles produced by surface active agent and prevent production of dispersion in battery performance by adding defoaming agent to electrolyte of a battery having a belt-like separator which is coated with the surface active agent.

CONSTITUTION: For a secondary battery using nonaqueous electrolyte, bubbles are produced because of surface active agent coated on a separator to make nonaqueous electrolyte penetrate into the separator smoothly when the nonaqueous electrolyte is injected. By injecting the electrolyte with defoaming agent added to it, production of bubbles is restricted. For the defoaming agent, silicone resin powders, silicone resin blended with surface active agent or inorganic powders, etc., is used. Reduction of charge/discharge cycles by decrease of the injected quantity of electrolyte caused by production of bubbles can be restricted by this, and production of dispersion in battery performance can be prevented.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against

examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998, 2003 Japan Patent Office

http://www.i. and inc ac im/ A 1/month/datail/main/m. A A A -041/4D A 4000/00/24D1 1

'MT 10000